

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	10/700,971
Filing Date	November 4, 2003
First Named Inventor	Muthiah Manoharan
Art Unit	1635
Examiner Name	Sean McGarry
Attorney Docket Number	ISIS-5782

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (If known)			
	1	U.S. 4,720,483	01-19-1988	Jansz et al.	
	2	U.S. 4,757,141	07-12-1988	Fung et al.	
	3	U.S. 5,082,934	01-21-1992	Saba et al.	
	4	U.S. 5,151,510	09-29-1992	Stec et al.	
	5	U.S. 5,424,413	06-13-1995	Hogan et al.	
	6	U.S. 5,506,212	04-09-1996	Hoke et al.	
	7	U.S. 5,561,043	10-01-1996	Cantor et al.	
	8	U.S. 5,631,148	05-20-1997	Urdea	
	9	U.S. 5,639,873	06-17-1997	Barascut et al.	
	10	U.S. 5,719,271	02-17-1998	Cook et al.	
	11	U.S. 5,760,202	06-02-1998	Cook et al.	
	12	U.S. 5,861,493	01-19-1999	Cook et al.	
	13	U.S. 5,891,684	04-06-1999	Usman et al.	
	14	U.S. 5,955,443	09-21-1999	Bennett et al.	
	15	U.S. 5,998,203	12-07-1999	Matulic-Adamic et al.	
	16	U.S. 6,133,246	10-17-2000	McKay et al.	
	17	U.S. 6,210,892 B1	04-03-2001	Bennett et al.	
	18	U.S. 6,222,025 B1	04-24-2001	Cook et al.	
	19	U.S. 6,262,036 B1	07-17-2001	Arnold, Jr. et al.	
	20	U.S. 6,274,723 B1	08-14-2001	Nilsen	
	21	U.S. 6,506,559 B1	01-14-2003	Fire et al.	
	22	U.S. 6,818,759 B2	11-16-2004	Beigelman et al.	
	23	U.S. 7,022,828 B2	04-04-2006	McSwiggen	
	24	U.S. 2003/0125241 A1	07-03-2003	Wissenbach et al.	
	25	U.S. 2003/0139585 A1	07-24-2003	Uhlmann et al.	
	26	U.S. 2003/0143732 A1	07-31-2003	Fosnaugh et al.	
	27	U.S. 2003/0206887 A1	11-06-2003	Morrissey et al.	
	28	U.S. 2004/0029275 A1	02-12-2004	Brown et al.	
	29	U.S. 2004/0146867 A1	07-29-2004	Slattum et al.	
	30	U.S. 2005/0142535 A1	06-30-2005	Damha et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁵
		Country Code ³ - Number ⁴ - Kind Code ⁵ (If known)				
	31	EP 0 266 168 A2	05-04-1988	Amoco Corp.		
	32	WO 94/02498 A1	02-03-1994	Worcester Foundation for Experimental Biology		
	33	WO 96/07392 A2	03-14-1996	Hybridon, Inc.		
	34	WO 02/44321 A2	06-06-2002	Max-Planck-Gesellschaft Wissenschaften E.V.		

Examiner
SignatureDate
Considered

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 3

Complete if Known

Application Number	10/700,971
Filing Date	11-04-2003
First Named Inventor	Muthiah Manoharan
Art Unit	1635
Examiner Name	Sean McGarry
Attorney Docket Number	ISIS-5782

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	35	ALAHARI, <i>J. Pharmacology and Experimental Therapeutics</i> , 1998, 286, 419-428	
	36	BEIGELMAN, <i>J. Biol Chem</i> , 1995, 270, 25702-25708	
	37	BERGER, <i>Nucleic Acids Research</i> , 1998, 26, 2473-2480	
	38	BEVILACQUA, <i>Biochemistry</i> , 1996, 35, 9983-9994	
	39	BOUTLA, <i>Current Biology</i> , 2001, 11, 1776-1780	
	40	COOK, <i>Anti-Cancer Drug Design</i> , 1991, 6, 585-607	
	41	DAMHA, <i>J. Am. Chem. Soc.</i> , 120:12976-12977	
	42	ELBASHIR, <i>EMBO J.</i> , 2001, 20, 6877-6888	
	43	HAMMOND, <i>Nature</i> , 2001, 2, 110-119	
	44	KIMURA-HARADA, <i>FEBS Lett.</i> , 1971, 13, 335-338;	
	45	KOIZUMI, <i>Nucleic Acids Research</i> , 1989, 17, 7059-7071	
	46	KUIMELIS, <i>Nucleic Acids Res.</i> 1994, 22, 1429-1436	
	47	LESNIK, <i>Biochemistry</i> , 1995, 34, 10807-10815	
	48	PARRISH, <i>Molecular Cell</i> , 2000, 6, 1077-1087	
	49	PORTA, <i>Biotechnology</i> , 1995, 13, 161-164	

Examiner
SignatureDate
Considered

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/700,971
				Filing Date	11-04-2003
				First Named Inventor	Muthiah Manoharan
				Art Unit	1635
				Examiner Name	Sean McGarry
Sheet	3	of	3	Attorney Docket Number	ISIS-5782

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	50	SHUMAN, <i>J. Biol Chem</i> , 1993, 268, 18943-18950	
	51	TOSQUELLAS, <i>Nucleic Acids Research</i> , 1998, 26, 2069-2074	
	52	TRACEWELL, <i>Toxicology and Applied Pharmacology</i> , 1995, 135, 179-184	
	53	TUSCHL, <i>Molecular Interventions</i> , 2002, 2, 158-167	
	54	VERONESE, <i>Il Farmaco</i> , 1999, 54, 497-516	
	55	WILDS, <i>Nucleic Acids Res.</i> , 2000, 28, 3625-3635	
	56	WU, <i>J. Biol. Chem</i> , 1998, 273, 2532-2542	
	57	YU, <i>RNA</i> , 1997, 324-331	
	58	YU, <i>Bioorganic and Medicinal Chemistry</i> , 1996, 4, 1685-1692	
	59	Table listing related applications and office actions and rejections from those related applications	

Examiner Signature	/Sean McGarry/	Date Considered	05/27/2008
--------------------	----------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.